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FEDERAL HIGHWAY ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION

PREPARED BY  
STATE OF MONTANA  
DEPARTMENT OF HIGHWAYS  
FINAL  
ENVIRONMENTAL STATEMENT

FOR  
PROJECT I 90-1 (12) 22 STATE DOCUMENTS  
DREXEL - EAST & WEST



THIS HIGHWAY IMPROVEMENT IS PROPOSED FOR FUNDING UNDER TITLE 23, U.S.C. THIS STATEMENT FOR THE IMPROVEMENT WAS DEVELOPED IN CONSULTATION WITH THE FEDERAL HIGHWAY ADMINISTRATION AND IS SUBMITTED PURSUANT TO:

SECTION 102(2) (C)  
PUBLIC LAW 91-190  
H. J. ANDERSON, DIRECTOR OF HIGHWAYS  
By Jack R. Beckert  
ACTING ADMINISTRATOR,  
ENGINEERING DIVISION

Date 2-1-73

REVIEWED FOR CONTENT AND ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION

Date \_\_\_\_\_ By \_\_\_\_\_  
F.H.W.A. REGIONAL ADMINISTRATOR

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#### INTRODUCTORY NOTE

This document is the Final Environmental Statement for Interstate Route 90 Project I-90-1(12)22. It has been compiled and written by the design consultants, Menasco-McGuinn Associates, for the State of Montana Department of Highways in accordance with Section 102(2)(C) of the National Environmental Policy Act of 1969. This final statement is being submitted subsequent to and is a product of the Draft Environmental Statement that was distributed for inter-agency review in May of 1971. The comments received from interested agencies regarding the draft statement were especially helpful in preparing this statement and are incorporated herein. Whereas there are no Section 4(f) lands affected by the project, this statement contains no comments specifically directed thereto.

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Attachments: Aerial Photo Prints and Vicinity Map

Letters of Comment on Draft Environmental Statement  
(Letter #1 through #11)

## SUMMARY

### 1. ADMINISTRATIVE ACTION

Action: Final Environmental Statement.

### 2. PROJECT DESCRIPTION

This statement concerns 5.3 miles of Interstate Route 90 located in Mineral County, some six miles west of St. Regis, Montana. It begins at an area locally known as Henderson and terminates less than a mile east of where Ward Creek joins the St. Regis River. The project provides for the construction of a four-lane divided highway, two full diamond interchanges, one special design access facility, a safety rest area, eight major structures, and approximately one mile of fishing access road.

The project is located in a particularly scenic canyon, follows a valuable fishing stream, and intersects important winter game range. Its location has prompted a close association with both the U.S. Forest Service and the Montana Department of Fish and Game throughout its development.

In conjunction with the construction of the Interstate from Henderson to St. Regis, the Camel's Hump Road (once U.S. 10 to St. Regis) has been paved to provide a construction detour except for the winter months when heavy snowfall makes the detour impractical.

### 3. ENVIRONMENTAL IMPACT

The project should have little effect on the local residents. The impact on the present levels of population, health, education, employment, and economy is expected to be negligible. Furthermore, the project is not expected to promote any significant degree of change in any of these features in the near future. The natural environment will be affected to the extent that valuable winter game range will be lost, fish habitat in

the St. Regis River will be intruded upon, and rather imposing scars left upon the land. All of the attributes of the completed Interstate apply to this project; however, the vastly improved access to the area is expected to add even greater numbers to the many who already enter the uncommonly fine environment surrounding the project area, mostly to simply enjoy the natural pleasures it provides.

#### 4. ALTERNATIVES

The Camel's Hump Road, the previous route to St. Regis until replaced by the present traveled way in 1951, was considered as a possible route for the Interstate. The decision to follow the present route along the St. Regis River was based primarily on long-range economics, efficiency, and less additional impact to that already imposed upon the land.

Within the canyon itself, several alignments were proposed and thoroughly studied. The final design alignment is the product of numerous studies, shifts, and revisions to revisions. In certain areas, the U.S. Forest Service was implemental in producing improvements that reduced the environmental impact.

#### 5. INTER-AGENCY REVIEW OF THE DRAFT STATEMENT

The following agencies were supplied copies of the Draft Environmental Statement and invited to return any comments pertinent to the project's effect on the environment. Some returned timely and helpful suggestions, facts, and recommendations that are either quoted or summarized here, or incorporated within the Final Environmental Statement. We assume that those who did not return comments were satisfied that the project contains no adverse effects so far as their agencies are concerned.



The agencies answering and a summary of their comments are as follows:

Letter #1

U. S. Department of Transportation  
Federal Highway Administration  
I. C. Lloyd  
Regional Environmental Coordinator  
22 S. W. Morrison Street  
Portland, Oregon 97204

Comment: Generally compliments the Draft Statement including the discussion of the resources committed to the project. Acknowledges the apparent level of coordination involved in developing the project. Suggests the Final Statement include a more comprehensive project map. Also suggests a more detailed discussion of the visual impact of the project and the measures incorporated into the proposed channel change. Expresses desirability of additional discussion concerning the environmental impact had the project been routed over the Camel's Hump Road.

Discussion: All of Mr. Lloyd's suggestions are well taken and an effort has been made to include the additional discussion in the Final Statement. A comprehensive map of the project features has also been included.

Letter #2

Department of Transportation  
United States Coast Guard  
Thirteenth Coast Guard District  
618 Second Avenue  
Seattle, Washington 98104

Comment: Acknowledges review of the Draft Statement and states that the project will have no foreseeable impact on their programs. (Signed: J. J. McClelland, Rear Admiral. U.S. Coast Guard Commander).

Letter #3

U. S. Department of Transportation  
Bureau of Outdoor Recreation  
Pacific Northwest Region  
1000 Second Avenue  
Seattle, Washington 98104

Comment: Acknowledges review of the Draft Statement by their

staff and states that they have no facilities in the area to be affected by the project. Indicates that the Statement is adequate so far as their interests are concerned. (Signed: Ernest E. Allen, Acting Regional Director).

Letter #4

Department of the Army  
Omaha District Corps of Engineers  
7410 U.S. Post Office and Court House  
Omaha, Nebraska 68102

Comment: States that there are no Corps projects being considered that would be affected by this project. It also offers the following recommendations concerning the rivers and streams:

"...The road segments traverse areas subject to high intensity storms, flood runoff and erosion. All segments which might be subject to erosion should be protected. All river crossings should provide sufficient floodway to preclude increasing the flood hazard."

(Signed: R. G. Burnett, Chief, Engineering Division).

Discussion: The erosion control measures associated with this project are more than normally required and are still involved in further examination. A complete hydraulic analysis was made for each structure to assure that structure designs will not promote future flooding. Every possible measure is being considered to prevent future erosion and protect the area waterways.

Letter #5

U. S. Department of Agriculture  
Forest Service  
Region One  
Missoula, Montana 59801

Comment: "...The State, to date, has accepted all of the Forest Service recommendations for this project pertaining to the location and minimizing impacts. We therefore accept that the project as planned offers the minimum environmental impacts for the location and standards..."

The reply also notes the erroneous implication in the Draft Statement that no logging is planned within sight of the Interstate. It further states that logging is definitely planned for areas visible from the Interstate and offers the following assurances: "...Precaution will be taken to prevent degradation of scenic qualities by selective cutting, screening, logging methods, road location, block layout, etc."

The reply also questions the validity of the comments in the Draft Statement to the effect that greater impact to wildlife and the land would be imposed over the Camel's Hump Road. (Signed: C. N. Weaver for Steve Yurich, Regional Forester).

Discussion: A worthwhile spirit of cooperation has existed with the Forest Service throughout the development of the project and the environment will surely benefit from their recommendations and assistance. Needless to say, they are well aware of the visual impact created by logging operations; their continued efforts to reduce such impact is reassuring.

The Draft Statement failed to present any reasons behind the judgement that the Camel's Hump route would suffer greater environmental impact. A brief discourse here may promote a better understanding. The Camel's Hump Road is a perfect example of how nature works to repair the ravages of men on his environment. Every type of native vegetation, from grasses to evergreens, have re-established themselves throughout the greatest part of the original right-of-way. Many of the cut and fill slopes have recent growth shrubs, bushes and conifers of respectable size growing on them and new growth is evident everywhere; all since the road was abandoned in 1951. The original right-of-way was extremely narrow by today's standards and there are aged stands of timber growing directly adjacent to the shoulders along much of the route.



With the relatively slight impact suffered when the old highway was built and the natural repair that has taken place since it was abandoned, the Camel's Hump route is truly beautiful to drive for those who will take the time to enjoy it. On the other hand, the construction of the present U.S. 10 and the railroad through the St. Regis canyon has already altered the natural state of the land to an unfortunate degree. Man's continued use of this route has not allowed any noticeable natural repair.

One must carefully consider the existing condition of the two routes to fully realize the comparative impacts. It is a question of what a four-lane highway would do to a route where the original intrusion was far less to begin with, compared to the additional impact required to place the Interstate over an established route. Under the proposed action, the impact will continue to be localized over an established route already bearing the adverse effects of progress, rather than starting over again through an area that is well on its way to erasing man's invasion. Clearing was kept at an absolute minimum when the Camel's Hump Route was repaved as a construction detour. With the Forest Service desiring to maintain it as a lowspeed scenic drive once the Interstate is completed, it still appears reasonable to affirm that the additional impact to the present environment will be considerably less over the proposed route.

Letter #6

U. S. Department of the Interior  
Bureau of Mines  
Intermountain Field Operation Center  
Building 20  
Denver Federal Center  
Denver, Colorado 80225

Comment: Reply includes timely information on production levels of mines east of the project area. It further states that the proposed project will have no foreseeable conflict with mineral resources or the mineral industry in Mineral County. (Signed: O. M. Bishop, Chief, I.F.O.C.).

Letter #7

State of Montana  
Department of Fish and Game  
Helena, Montana 59601

Comment: Reply is justly critical of the Draft Statement for its brief treatment of fish, wildlife, and vegetation resources. Particular mention is made to the effects on browse plants, highway mortality rates of deer and elk, winter game range in general, game animal populations, and fish habitat. The discussion points out several salient omissions and offers corrections to other incorrect statements. (Signed: Ralph W. Boland, Assistant Chief, Environmental Resources Division).

Discussion: The reply is relatively long and indicates not only a thorough review of the Draft Statement, but an overall concern for the environmental effects of the project. Their critique was well taken and it is hoped that the Final Statement satisfies their misgivings. An effort has been made to convey the importance of the fish and wildlife resources to the environment, define the anticipated effects thereon, and present the measures proposed by all concerned to minimize the harmful effects.

Letter #8

Montana Water Resources Board  
Sam W. Mitchell Building  
Helena, Montana 59601

Comment: The Draft Statement was referred to their "Environmental Impact Committee" who had the following comments and requests: (1) questions the relatively small amount of independent alignment; (2) requests consideration

of rippled terraces; (3) requests greater development of rest area without stereotyping; (4) requests study of flood plain around rest area; (5) requests additional information on sanitary facilities and water well at rest area; (6) expresses dislike for contractor option of borrow and waste areas; and (7) requests more comprehensive project maps. (Signed: Douglas G. Smith, Director).

Discussion: Revisions included in the Final Statement will answer some of the above requests. Some are not within the scope of the purpose of this environmental statement and information normally furnished the Water Resources Board relative to water well tests, etc. will be supplied in the usual manner.

Letter #9

State of Montana  
State Department of Health  
Helena, Montana 59601

Comment: Reply expresses concern for potential mosquito breeding areas in the form of stagnant pools that might be created by the construction of the project. (Signed: Claiborne W. Brink, P.E., Director, Division of Environmental Sanitation).

Discussion: The project has been designed to provide adequate drainage throughout. Any drainage collected or intercepted by the Interstate will be carried to the river and, as far as plans and cross sections indicate, no ponding will occur.

Letter #10

State of Montana  
State Soil Conservation Committee  
Capitol Station  
Helena, Montana 59601

Comment: Reply offers no objections as design has complied to Forest Service and Department of Fish and Game recommendations. It does state that topsoil should be stripped and utilized. (Signed: O. M. Ueland, Executive Secretary).

Discussion: As in all Interstate projects, all useable topsoil will be stripped and stockpiled prior to beginning construction and replaced where feasibly possible.

Letter #11

United States Post Office  
Cecil F. MacDonald, Postmaster  
St. Regis, Montana 59866

Comment: Reply expresses concern for fishermen parking on the shoulder of the Interstate and comments on the importance of access to the Little Joe Road on another portion of the Interstate through the canyon.

Discussion: Parking along the Interstate (other than in emergency) is illegal. However, past experience has shown that unfortunately a fence does not eliminate these occurrences. Discussion of comments relative to the Little Joe Road will be covered in the St. Regis East and West Final Environmental Statement.

The following agencies were provided copies of the Draft Environmental Statement, but did not reply:

Montana Department of Planning and Economic Development  
ATTENTION: Mr. Perry F. Roys, Executive Director  
Capitol P.O. (1716 - 9th)  
Helena, Montana 59601

Montana Council of Natural Resources and Development  
ATTENTION: Mr. Richard E. Mayer, Landscape Architect  
Room 420, Mitchell Building  
Helena, Montana 59601

State Council of Natural Resources  
ATTENTION: Mr. George T. McGaffick, Coordinator  
Sam W. Mitchell Building  
Helena, Montana 59601

Board of County Commissioners  
Mineral County  
Superior, Montana 59872

Honorable E. O. Pike  
Mayor  
Superior, Montana 59872

Mrs. Anna J. Murphy  
Superintendent of Schools  
Superior, Montana 59872

Agricultural Stabilization and Research Service  
112 West 13th Avenue  
Helena, Montana 59601

Rural Electrification Administration  
Montana Associated Utilities  
Rainbow Western Motel  
Great Falls, Montana 59401

Department of Agriculture  
Dr. T. C. Byerly  
Office of Secretary of Agriculture  
Washington, D. C. 20250

Federal Power Commission  
555 Battery Street  
San Francisco, California 94111

Department of Housing and Urban Development  
616 Helena Avenue  
Helena, Montana 59601

Soil Conservation Service  
4930 Ninth Avenue South  
Great Falls, Montana 59401

Geological Survey  
Federal Center  
Denver, Colorado 80225

U. S. Geological Survey  
Federal Building  
Helena, Montana 59601

Department of Health, Education and Welfare  
Environmental Health Service &  
National Institute of Environmental Health and Sciences  
Cogswell Building  
Helena, Montana 59601

Department of the Interior  
Bureau of Sport Fisheries  
Area Supervisor  
Billings, Montana 59103

Bureau of Land Management  
Federal Building  
316 North 26th Street  
Billings, Montana 59101



National Park Service  
1709 Jackson Street  
Omaha, Nebraska 68102

Economic Development Administration  
415 First Avenue North  
Seattle, Washington 98109

Bureau of Reclamation  
Regional Director  
P.O. Box 8008  
Boise, Idaho 83707

Environmental Protection Agency  
Mr. Charles Fabrikant  
Director of Impact Statements Office  
1626 K Street N.W.  
Washington, D.C. 20460

## 6. PUBLIC HEARINGS

A location public hearing concerning the Interstate from Saltese to Ward Creek was held on October 19, 1965 in Saltese, Montana. The majority of the public comments concerned the more populated area west of this project. The question of the effect on fishing in the St. Regis River was raised but there were no comments directly concerning the location from Henderson to Ward Creek.

The design public hearing for the Interstate from Henderson to St. Regis was held on July 29, 1971, in St. Regis. Very little was said concerning this project and most of the conversation centered on access problems on the St. Regis East and West Project. There were no specific objections raised concerning any of the features of this project.

## 7. AVAILABILITY OF DRAFT STATEMENT

The Draft Environmental Statement for this project was mailed for inter-agency review on May 27, 1971.

## I. INTRODUCTION

As required by Section 102(2)(C) of the National Environmental Policy Act of 1969, this report summarized the considerations given to preserving and restoring the ecological balances and environmental quality as they will be affected by the construction of 5.3 miles of Interstate highway in the St. Regis River canyon near Drexel, Montana.

The United States Forest Service and the Montana Fish and Game Department have been closely associated with this project because of their considerable interests in this scenic canyon. These organizations have been consulted often during the planning and design phases, and their expertise and experience in environmental matters is reflected in the final design. In addition, these two organizations have made statements as to what impact the Interstate highway will have on the environment of the St. Regis River canyon. Much of the information in this environmental impact statement has been obtained from these two sources.

## II. DESCRIPTION OF PROJECT

Interstate 90 is an east-west cross-country route of the National System of Interstate and Defense Highways. This route extends from Boston, Massachusetts to Seattle, Washington passing through 13 states enroute, and will provide a continuous high-speed highway through the northerly part of the country. This report is concerned with 5.3 miles of Interstate 90 in Mineral County in the western part of the State of Montana. The project is named after a Chicago, Milwaukee, St. Paul, and Pacific Railroad electrical power substation and siding called Drexel, which is located approximately in the middle of the project. Drexel is located 18 miles west of Superior, the county seat of Mineral County, and six miles west of St. Regis, the nearest town.

The design standards used on this project are the typical interstate standards approved for use by the Montana State Highway Commission in their Field and Office Standards. The geometrics for mountainous terrain are controlled by a 55 m.p.h.

minimum design speed with a maximum horizontal curvature of 7.5 degrees and a maximum gradient of five percent. The highway will have four 12-foot driving lanes with 10-foot outside shoulders and 4-foot inside shoulders. With these limitations, the location possibilities for an Interstate highway in the narrow St. Regis canyon are severely limited.

The typical sections vary frequently throughout the project; the narrowest being a standard barrier median section on 38-foot centers and the widest being a depressed median section on 64-foot centers. The sections have been selected to meet the demands of the terrain as near as possible and include some 1.8 miles of independent alignment. Owing to the added safety and aesthetic value of separate east-west alignments, every effort was made to provide the maximum possible amount in the narrow canyon not particularly conducive to independent alignments.

Traffic counts made in the project area produced an average daily traffic (ADT) of 1,971 vehicles in 1965. Projected to the design year, including traffic attracted and generated by the completion of the Interstate system, the 1991 ADT used as the basis for design was 5,400 vehicles. The design hourly volume (DHV) used for design purposes was 710 vehicles. Individual traffic counts and design year projections were made for each of the three access points on the project.

There will be eight major structures required for the project. The location, purpose, and approximate dimensions of these structures are as follows:

- (1) Henderson Interchange; carries Interstate over access road; dual 41.5' x 140'.
- (2) Twelve-mile Creek; stream crossing; 17' x 120' structural steel plate culvert.
- (3) Big Bend Area; river and railroad crossing; 81.5' x 480'.
- (4) Big Bend Area; river and railroad crossing; 81.5' x 600'.
- (5) Approximately 1/2 mile west of Drexel; river crossing (east-bound only); 41.5' x 300'.

- (6) Approximately 1/2 mile west of Drexel; river crossing (east-bound only); 41.5' x 320'.
- (7) Drexel Interchange; carries Interstate over access road; dual 41.5' x 140'.
- (8) Drexel Access Road; river crossing replacing existing bridge into Drexel; 20' x 130'.

The smaller drainage structures will be concrete pipe culvert with standard drain inlets where necessary. Concrete pipe was considered preferable because it is compatible and will blend with the light-colored rock and soil that would subject steel to corrosive attack.

One channel change, located immediately east of the Drexel Interchange, is required on the project. It will be some 1,500 feet long and is necessary to avoid a substantial cut in a potential slide area. The measures planned to minimize the adverse effects of this channel change are discussed in Section V.

There are three private ownerships intersected by the project, but the majority of the required right-of-way will be taken from National Forest Lands.

In conjunction with the construction of the Interstate from Henderson to St. Regis, the Camel's Hump Road was repaved in 1971 to provide a construction detour from April through November of each construction year. Because snow removal would be a major problem and winter travel is significantly reduced, traffic will be routed through the canyon during the remaining months.

Other project features include complete signing and delineation, safety guard rail where warranted, and appropriate erosion control measures.

Full control of access is required in keeping with Interstate standards; however, owing to the terrain through the canyon, access control fence is planned only in the Henderson area. Controlled access facilities will be provided at three locations within the limits of the project:

#### A. Henderson Interchange

This full diamond interchange will provide access to the Camel's Hump Twelve-mile Creek Road, the rest area, and a fishing access road. The Camel's Hump Road was at one time the route taken by U.S. 10 into St. Regis until it was replaced by the present route along the river in 1951. The Twelve-mile Creek Road branches from the Camel's Hump Road at abandoned Cabin City and leads to a U. S. Forest Service campground some two miles north of the interchange, eventually terminating in Thompson Falls. The Cabin City campground is used extensively during the tourist season and the Forest Service has indicated that, with through traffic in Thompson Falls steadily increasing, this road will eventually be paved. A fully developed safety rest area will be located between the river and the interchange where motorists may leave the Interstate to relax and enjoy the pleasant environment or stop in case of emergencies.

A fishing access road also begins at this interchange. This road retains a portion of the present U.S. 10 along the St. Regis River and extends eastward  $1\frac{1}{2}$  miles to the Big Bend area. The St. Regis River is heavily fished and with much fishing access within the canyon curtailed by the Interstate, this road is expected to be used extensively. The Forest Service has indicated their interest in developing minimal facilities such as outhouses, trash cans, barrier posts, and possibly fire circles to accommodate the anticipated use of this road.

#### B. Drexel Interchange

This full diamond interchange provides access for the residents of Drexel and for a highway maintenance station to be located near the interchange. It also works in conjunction with the Ward Creek Interchange a mile to the east.

#### C. Ward Creek Interchange

This access facility is unlike many others, being designed specifically for the limited space between the hillside and the river. It provides access to



the Ward Creek Road (Ward-Eagle area) and is primarily intended for logging and fire control access. It also provides access for hikers, hunters, and snowmobilers wishing to enjoy the scenic high country. Access is provided to and from the eastbound lanes only and out-of-direction travel to the Drexel Interchange (one mile west) or the Two-mile Creek Interchange (2½ miles east) is required, depending upon the user's point of origin or destination.

### III. DESCRIPTION OF THE EXISTING ENVIRONMENT

#### A. Human Resources

The 1970 Bureau of the Census population estimate for Mineral County is 2,867. With a land area of 1,223 square miles, the county's population density is 2.34 persons per square mile. Very little population growth is anticipated as the estimated 1990 figure is 3,053, or about a 6½ percent increase in the next twenty years. Mineral County has only three towns of any significance. The largest is Superior, the county seat, with a 1970 population of 993. St. Regis and Alberton have populations of less than 500. The rest of the population is distributed mostly throughout the St. Regis and Clark Fork River valleys in several small settlements and a few farms.

Educational opportunities through the high school level are provided at Superior, Alberton, and St. Regis. There is an eight-grade elementary school in Saltese with the students going on to high school in St. Regis.

Medical attention is available at a small hospital in Superior or at the most comprehensive facilities in Missoula. The area is particularly fortunate in its exceedingly pure water and pollution-free air; environment-related health problems are non-existent.

Employment is primarily in the lumber and wood products industry with related retail trade. Recreation and tourism are another important, though seasonal, source of income. Employment opportunities are limited and the residents do not have much latitude in their selection of jobs.

## B. Physiography and Geology

Mineral County lies in the Bitterroot Range of mountains that form a part of the western border of Montana. It is ruggedly mountainous with numerous drainages and is heavily timbered throughout.

The climate in western Mineral County is quite similar to that of the Pacific Coast regions. Prevailing west to southwest winds flowing across the mountains produce substantial amounts of precipitation that vary from the high mountain tops to the stream valleys below. Fifty-year annual averages vary from 17.6 inches recorded at Superior to 31.4 inches recorded at Haugan near the project site. In the western part of the county, the highest percentage of the annual precipitation falls during the winter months as snow, generally from November through March or early May. The resulting snowpack is retained well in the high mountains and with its runoff lasting well into the summer months, local drainages maintain good flow the year around.

Geologically, the mountains in Mineral County are metasediments of the Precambrian Belt Series. The history of these mountains began a thousand million years ago when sands, silts, and clays were deposited in an ancient ocean. Later, these materials were transformed into quartzites, argillites, and phyllites. Extensive faulting and folding crumpled the original strata and displaced rock segments thousands of feet, mainly in a vertical direction. The result of the faulting and folding process has been a complex system of joints and shear zones with numerous planes of weakness. There are two fault zones near the project; one near 12-mile Creek and the other at the Big Bend area. Neither of these faults shows evidence of recent activity, but seismic activity is possible at any time in geologically young mountain ranges such as these.

The overlying soils are predominantly cold, light-colored, very stony and sandy, acidic soils on steep slopes with stony loam on the more moderate slopes.

### C. Land Use

The only land development along the project is at the Drexel substation. Of the three private ownerships intersected by the Interstate, only the Henderson area shows any possibility of future development. At this location, some 700 acres are being considered for subdivision. The remaining land is in the Lolo National Forest and is dedicated to timber production and winter game range.

### D. Fish and Wildlife Resources

The Montana Fish and Game Department has designated the St. Regis River as one of the most important fishing streams in western Montana. Use surveys conducted by the Department have indicated an excess of 4,000 man-days used by fishermen in the five-month period from May to September. Owing to the fact that most of those fishing the river are not area residents, the river is also an asset to the local economy.

Stream surveys indicate the predominant species to be cutthroat trout in the headwaters and brook trout in lower reaches of the river. Dolly Varden, brown and rainbow trout, as well as mountain whitefish, also contribute to the game fish population. Electrofishing data has shown certain stretches of the river to contain as many as 290 fish per 1,000 feet of stream. The fish population is supplemented by the annual introduction of 9,000 catchable rainbow trout.

Game animals found in the project area include elk, mule, and whitetail deer, black bear, mountain lion, and occasionally, moose. A few of the non-game species that inhabit the area include coyote, bobcat, badger, raccoon, porcupine, and squirrel. Valuable fur bearers such as beaver, fox, and mink are also found in the area.

Game birds such as Franklin's, blue, and ruffed grouse are plentiful in the area. Water fowl are also found during the migratory seasons.

Big game hunting in the area is important to local area residents engaged in providing services to non-residents. The area is heavily hunted, especially by sportsmen seeking the highly prized elk. Big game animals are plentiful, but the area is rugged and generally difficult to hunt.

### E. Vegetation Resources

The area's greatest economic asset is directly attributed to the environment; that is, the commercial quality timber that covers much of Mineral County. The predominant species found in the area's forests are Douglas fir, ponderosa pine, Engleman spruce, and western larch. Douglas fir accounts for some one-third of the annual sawtimber harvest. The four major species account for four-fifths of the total sawtimber harvested. In 1969, Mineral County received \$400,695 as their share from the sale of timber on Federal land within its boundaries. This amount is 25 percent of the total received from the sale of this timber. The largest part of the annual harvest of timber is used within the county in the lumber industry. Products include mine timbers, railroad ties, posts and poles, and precut items such as log homes, fireplace logs, and doors.

Among the important vegetative resources are the browse plants that support the deer and elk population. The main forage species are serviceberry, evergreen Ceanothus, redstem Ceanothus, willow, and chokecherry. These plants are vital to the survival of the game herds inhabiting the area; as such, they are as important to the environment as the animals themselves.

### F. Water Resources

The St. Regis River is the primary drainage in the project area. It begins near the Montana-Idaho border and is fed by numerous streams and springs along the 39 miles to its convergence with the Clark Fork River at St. Regis. The river is joined by three such tributaries within the limits of the project: Twelve-mile Creek, Henderson Creek, and Ward Creek. Twelve-mile Creek is the only stream, other than the St. Regis itself, to be affected by the project as the others enter from the opposite side of the canyon. Records from the U.S.G.S. gaging station 12-3540 located  $1\frac{1}{4}$  miles west of St. Regis yield the following data:



Drainage area: 303 sq. mi.

Average discharge 1958-1966: 558 cfs (404,000 acre-ft. per year)

Maximum recorded discharge: 11,000 cfs (flood of May 19, 1954)

Minimum daily discharge: 45 cfs (December 11, 1962)

The quality of the water is quite high and is a satisfactory medium for aquatic life. There are no known sources of pollution.

Human consumption is satisfied by high-quality ground water that is abundant throughout the area. Individual wells or springs account for most of the water used by local residents. Health problems related to drinking water are non-existent.

The water resources in the area are invaluable for the fish and wildlife they support, not to mention the enjoyment they bring to the thousands who camp, picnic, or simply stop along the various watercourses.

#### G. Transportation Systems

U.S. Highway Route No. 10 (Interstate Route 90) is the primary means of travel through the St. Regis canyon. The Twelve-mile Creek Road, which is currently a gravel road, is the junction of a through-road to Thompson Falls, Montana, and will eventually be paved.

There is one railroad line through the canyon which is being used by two railroad companies. The line belongs to the Chicago, Milwaukee, St. Paul and Pacific Railroad, and is also used by the Burlington Northern Railroad.

The nearest commercial airport is at Missoula, some 72 miles east of St. Regis.

### IV. EVALUATION OF ENVIRONMENTAL IMPACT

#### A. Human Resources

The environmental impact on the Human resources existing within the limits of the project is expected to be slight, if felt at all. The only residents affected



by this project live in Drexel and will not require relocation. Their movements to and from trade centers, schools, and hospitals will be significantly safer and easier once the Interstate is complete. Owing to their close proximity to the project, they will be subjected to noise and dust pollution and transportation will be a problem during construction. While these effects are unavoidable and must be endured by the Drexel residents, every measure will be enforced to insure their individual safety and reduce their inconvenience.

The population of the area will increase with the development of the Henderson area, but this cannot be attributed to the project. The project, once a part of the completed Interstate, will significantly increase the ease and safety of access to the area for present and future residents alike, not to mention the thousands who enjoy the natural pleasure of the area.

#### B. Physiography and Geology

The project will have no effect on the existing physical features other than the actual construction corridor and possible waste and borrow areas. The project's earthwork balance is such that, with judicious embankment slope revisions during construction, there should not be any need for waste or borrow areas. In those areas where the present highway is not covered by the Interstate, it will be obliterated and treated to promote its return to its natural state.

#### C. Land Use

The land use patterns are firmly set and there is no reason to expect any changes due to the project. Timber harvest will continue as programmed by the U.S. Forest Service and the development of the Henderson area is not contingent upon the Interstate. However, increased demands upon the land may be expected from sportsmen and tourists once the Interstate system is complete.

#### D. Fish and Wildlife Resources

The project will have a very definite effect on the fish habitat in the area. Moreover, the Interstate's effect on fish habitat in the St. Regis River is

not confined to this project alone, but is prevalent all the way from Lookout Pass to St. Regis. It becomes a far more serious consideration once the alignment enters the narrow canyon just east of Henderson. It should be noted that, from this point to Ward Creek, the river has already been severely channelized by the existing highway and railroad. Very little was ever done to control or repair the damage already suffered by the environment. Past mistakes notwithstanding, some encroachment on the river will be required and the possible loss of fish habitat must be considered an adverse environmental effect.

The same can be said for the effect the project will have on the wildlife habitat in the area, particularly where the large game animals are concerned. The project will require the irrevocable commitment of some winter game range. An examination of the construction limits and quality colored aerial photographs shows that relatively small amounts of forage producing land is taken by the project, especially in comparison to the total game range involved. It is reasonable to assume that the relatively small amount of actual forage lost should not seriously effect the game population. Nevertheless, any loss of natural habitat must be considered an unfavorable impact on the local environment.

It would seem that a far greater threat to the game population is presented by the highway itself. It is difficult to predict what effect the Interstate will have on the present mortality rate; that is, animals killed or injured on the highway. The project will not be fenced and the large cuts and fills will definitely channel the animals to fewer crossings. Because the Interstate is divided, an animal on the highway will only be threatened by traffic from one direction at a time and there will be considerably more room for a motorist to avoid the animals. The greater sight distance around a fewer number of flatter curves should also be in the animal's favor. This is not to say that the project will reduce the number of animals killed or injured each year, considering the fact that speed will increase as a result of this new facility.

#### E. Vegetation Resources

The only effect on the vegetation resources in the project area will be to the timber and forage now growing within the proposed construction limits. All marketable timber within the construction limits will be harvested and sold prior to start of any construction. The land once producing this timber, together with valuable browse plants, will be irrevocably committed to the project.

#### F. Water Resources

It has already been established that the project will affect the St. Regis River, and to a lesser degree, Twelve-mile Creek. Aside from the possible effect on fish habitat, the project will not have any permanent effects on the quantity or quality of any water in the area. Careful consideration is being given to the treatment of sewage at the rest area and with the erosion control measures that are a part of the project, there is no reason to expect adverse environmental impact once the project is complete. There will be unavoidable soil and sand pollution during construction, but the completed project will include extensive riprapping at all structures and embankments adjoining the river to preclude any future pollution.

#### G. Transportation Systems

The area will profit by all of the benefits attributed to the completed Interstate system. The immediate effect upon the area's transportation is easily realized by comparing the proposed Interstate design to the present roadway through the canyon.

### V. MINIMIZING ADVERSE ENVIRONMENTAL EFFECTS

The foremost considerations for minimizing the adverse environmental effects have been directed toward the river and the mountainside. On one hand to preserve valuable fish habitat and protect a scenic waterway; on the other hand to preserve

vital winter game range and reduce unsightly scars on the land. Unfortunately, one must suffer to protect the other and the hillside will bear the greater share of the impact. In a cooperative effort with both the Forest Service and the Department of Fish and Game, the alignment and grades have been studied, shifted, and revised many times in a long and exhaustive effort to fit the project to the environment with the least possible damage. This was the first and foremost step in minimizing the adverse environmental effects. It was then a matter of recognizing and accepting the harmful effects associated with the project and directing every effort toward reducing them. Measures have been provided to repair damage caused during construction and insure that the project will not propagate future damage once it becomes a permanent part of the environment.

Once the cuts and fills have been placed, there is not much we can do to restore lost game range as the browse plants lost cannot be successfully reseeded. Measures such as serrating slopes, planting, and reseeded for erosion control and aesthetic quality will be included in the project where beneficial in minimizing adverse effects. Recommendations have been received from all interested agencies and every effort will be made to restore affected lands where possible and preclude any future deterioration.

The river is more receptive to treatment so far as repairing damages caused by the project. The large culvert carrying Twelve-mile Creek under the Interstate will be set two feet below the normal flow line and baffles staggered throughout its length to promote and maintain a natural streambed through the pipe. The one channel change will be constructed and treated according to recommendations received from the Forest Service and Department of Fish and Game. Included are provisions calling for dry excavation, vertical side slopes, alternately sloping streambed, and the placement of boulder clusters. All embankment slopes that adjoin or encroach on the river will be placed as selective riprap to prevent any



future erosion. All bridge piers located in the river will receive similar treatment. The replacement of riparian vegetation is also planned to further minimize the adverse effects that are an unavoidable part of the project.

Once the project is complete, the interested agencies will surely want to analyze the effect on game movements across the new highway. It is possible that subsequent measures can be implemented to minimize the danger to wildlife and reduce the traffic hazard they present.

Perhaps the greatest good toward minimizing the harmful effects has come from the close association and cooperation with the U.S. Forest Service and the Montana Department of Fish and Game. Their reviews and recommendations have added immeasurably to the efforts determined to reduce and alleviate the unfortunate effects on an exceptionally beautiful environment.

The Department of Highways will be charged with controlling procedures during the construction of the project. Valuable experience gained from similar projects within the state will help to insure that every effort is made to conform to State law and established standards where air and water pollution is concerned. The safety and convenience of through traffic will be significantly enhanced by the Camel's Hump detour. Project controls will further require that access be maintained for those residing in Drexel, that through traffic be maintained during the winter months, and that rail traffic is not hindered during construction.

#### VI. ALTERNATIVES TO THE PROPOSED ACTION

The Camel's Hump Road was investigated as a possible route for the Interstate from Henderson to St. Regis. Preliminary construction cost estimates indicated comparable costs over either route. The total annual costs were considerably higher over the Camel's Hump Road and the savings accrued over a period of years were sufficient



in themselves to justify the canyon route. The higher annual costs were attributed to much more demanding grades and winter maintenance problems comparable to those experienced on Lookout Pass. The highest point on the existing Camel's Hump Road is 3,947 feet whereas the highest elevation on the proposed alignment is 3,028 feet. From an environmental standpoint, a comparison of the two routes would require much speculation. While there are no major watercourses to be effected over the Camel's Hump route, the additional impact on the St. Regis River is minor, compared to that already suffered. It was felt that, compared to the construction scars presently existing over either route, the additional impact would be less over the canyon route.

Having selected the canyon as the route for the Interstate, a comprehensive location study was made in which four routes through the canyon were presented. The proposed alignment is the result of combining portions from three of those presented.

Although a tentative location was selected for preliminary design, it too experienced considerable review and revision before a final design alignment was selected. One particularly difficult portion was at the Big Bend area. The selection of an alignment involved the construction of a scale model to visually evaluate the alignments in question.

A "do-nothing" alternate was also a possibility but the adverse environmental effects are not such as to warrant this alternate.

Very few projects have ever received the mile-by-mile attention that has been given to the Interstate from Henderson to Ward Creek.

## VII. SHORT-TERM USE vs. LONG-TERM PRODUCTIVITY

The short-term use of the local environment will not be affected by the project to any significant degree. There are no existing man-made features

affected other than the present highway which will be totally replaced by the Interstate. The normal living patterns of those in Drexel will be affected during construction and the railroad and loggers may anticipate some inconvenience. The canyon will also be lost for recreational purposes during construction.

The long-term gains that will be attributed to the completed project and the Interstate system as a whole should more than compensate for the temporary inconveniences. The local transportation needs will be more than satisfied by the freer, safer system. It will be especially beneficial to the many who use this primary east-west link with the west coast. Not to be forgotten are the thousands who will come to the area year after year to enjoy the myriad pleasures offered by the uncommonly fine environment inherent to the mountains surrounding Drexel.

#### VIII. OTHER BENEFITS OF THE PROPOSED ACTION

Other benefits from the construction of this portion of Interstate Route 90 are attributed to the National System of Interstate and Defense Highways as a whole. This system will provide a completely connected network of high-speed highways built to the highest standards of efficiency and safety. The completed system will increase the mobility of the nation, enhance the national economy by providing a better means for transporting people and goods, and reduce the appalling loss of life and property attributed to unsafe, out-dated highways. The Interstate has been built with the consideration and recommendations of the Department of Defense for the movement of personnel and material in the event of a national emergency; as such, it is a vital part of our total national defense system.



UNITED STATES GOVERNMENT

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION222 S. W. Morrison Street  
Portland, Oregon 97204

DATE: July 7, 1971

In reply refer to: 08-00-36

*Memorandum*

TO: Mr. H. N. Stewart  
Division Engineer  
Helena, Montana

FROM: I. C. Lloyd  
Regional Environmental Coordinator  
Portland, Oregon

SUBJECT: Montana I-90-1(12)22 Drexel East & West  
Draft Environmental Statement

The Regional Environmental Committee has reviewed the draft environmental statement for the subject project. Following are comments for your review and consideration in preparing the final environmental statement:

(1) Generally, this is a good draft environmental statement. Format is outstanding and the discussion of Commitments of Resources on page 8 is excellent. It is readily apparent a high level of coordination has been maintained throughout all stages of highway planning for the subject project.

(2) The draft environmental statement lacks an adequate map of the project area. This should be included with the final submittal.

(3) One of the primary environmental considerations in the planning and design of this Interstate 90 project in St. Regis canyon has been the visual impact of highway construction on the scenic quality of this area. Perhaps a more in-depth discussion of the various measures incorporated in the proposed project to minimize the visual impact of construction activities on the natural environment is warranted.

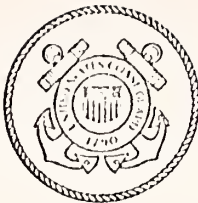
(4) Possibly, more detailed information on the proposed channel work in the St. Regis River is warranted. This highway project presents the opportunity to correct an adverse environmental impact made several years ago when the St. Regis River was severely channelized during the construction of present U.S. 10. The brief discussion on page 6 should be expanded to reflect, through careful environmental design, the reversal of a negative environmental impact by the planned construction of the subject project.

(5) It is noted Camel's Hump Road will be used to detour traffic away from the mainline construction area. More discussion is warranted on the environmental impact that highway construction would have on the natural environment along old Camel's Hump Road.



BUY U.S. SAVINGS BONDS REGULARLY ON THE PAYROLL SAVINGS PLAN





DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

Address reply to:  
COMMANDER (dpa)  
Thirteenth Coast Guard District  
618 Second Ave.  
Seattle, Wash. 98104

HELENA, MONTANA

JUN 21 1971

RECEIVED  
MONTANA HIGHWAY COMMISSION

• 5922

LETTER #2

18 JUN 1971

- Mr. Lewis M. Chittim, P. E.  
State Highway Engineer  
Montana Highway Commission  
Helena, Montana 59601

Dear Mr. Chittim:

The following project has been reviewed by the Commander, 13th Coast Guard District, Seattle, Washington, and it has been determined that said project will have no foreseeable significant impact upon the U. S. Coast Guard programs.

Draft Environmental Statement (dtd May 27, 1971)  
Project I 90-1 (12) 22  
Drexel East & West

Sincerely,

*J. J. McClelland*

J. J. McCLELLAND  
Rear Admiral, U. S. Coast Guard  
Commander, 13th Coast Guard District

RETURN TO M & F	
STATE HIGHWAY ENGINEER	
CHIEF ENGINEER	
ASSISTANT ENGINEER	
ACCOUNTING	
PLANNING & SURVEY	
DESIGN	
CONSTRUCTION	
MAINTENANCE	
MATERIALS	
OTHER	

Date Recd. Preconst. 6-22-71				
Act	Info	MAIL ROUTE	Attach	Initial
		30 Com. Plan		
		30 High Design		
		30 Survey Design		
		31 Survey Design		
		32 Survey Design		
		33 Survey Design		
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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF OUTDOOR RECREATION

PACIFIC NORTHWEST REGION  
1000 SECOND AVENUE  
SEATTLE, WASHINGTON 98104

IN REPLY REFER TO:

D36  
I 90-1 (12)22  
Drexel East and West

HELENA, MONTANA

JUN 28 1971

Mr. Lewis M. Chittim  
State Highway Commission  
Sixth Avenue and Roberts  
Helena, Montana 59601

Dear Mr. Chittim:

The draft environmental statement for the above referenced project received with your letter dated May 27, 1971, has been reviewed by our staff. We know of no public recreation areas, projects or proposals that would be adversely affected by this highway project. The statement, as it relates to our programs and interests, appears to be adequate.

Sincerely yours,

*Ernest E. Allen*  
Ernest E. Allen  
Acting Regional Director

Act	Info	MAIL ROUTE	Attach	Initial
		30 GGP JWH		
		30 Field Design		
		30 Sampling Design		
		31 Civil Engineers		
		32 Civil Region		
		32 Landscape		
		33 East Region		
		34 Hydraulic		
		35 Traffic		
		37 Planning		
		38 Records		
		38 Consultant Design		
		File		

Act	Info	MAIL ROUTE	Attach	Initial
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		32 Landscape		
		33 East Region		
		34 Hydraulic		
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## MROED-DC

MA DISTRICT CORPS OF ENGINEERS  
S. POST OFFICE AND COURT HOUSE  
OMAHA, NEBRASKA 68102  
RECEIVED  
JUL 16 1971  
HELENA, MONTANA

Dear Mr. Powers:

Referring to your letters of 27 May 1971 and 9 June 1971 concerning the Drexel East and West, and Big Timber-Greycliff projects, respectively. Drexel East and West is designated I 90-1(12)22 and Big Timber-Greycliff is designated I 90-7(18)364.

The proposed projects would have no effect upon existing Corps of Engineers projects or upon potential projects being considered by this District.

The road segments traverse areas subject to high intensity storms, flood runoff and erosion. All segments which might be subject to erosion should be protected. All river crossings should provide sufficient floodway to preclude increasing the flood hazard.

Sincerely yours,

R. G. BURNETT  
Chief, Engineering Division

for *M. S. Ellis*  
R. G. BURNETT  
Chief, Engineering Division

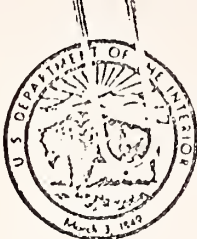
Date Recd. Preconcl. *5-17-77*

Act	Dist	MAIL ROUTE	Initial	Quantity
		30 CON. Design		
		30 Field Design		
		30 Building Design		
		31 Office Eng. Design		
		<del>32 Misc. Design</del>		
		33 Misc. Design		
		34 East Region		
		35 West Region		
		36 Construction		
		37 Construction Design		
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LETTER #5

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES

Intermountain Field Operation Center

Office of  
Chief

MONTANA HIGHWAY COMMISSION  
RECEIVED  
JUL 14 1971  
HELENA, MONTANA

BUILDING 20  
DENVER FEDERAL CENTER  
DENVER, COLORADO 80225

July 12, 1971

Mr. Lewis M. Chittim, P.E.  
State Highway Engineer  
Montana Highway Commission  
Helena, Montana 59601

Dear Mr. Chittim:

As requested by Grover O. Powers in his letter of May 27, we have reviewed the draft environmental statement on Drexel East & West, Project I 90-1(12)22.

Mineral County produced an undisclosed amount of copper, silver, gold, lead, zinc, clays, and sand and gravel in 1969 compared with a value of \$200,000 for these materials in the previous year. Mineral production in the county has been sporadic, and most of the producers have been located east of the project area, in or north of the Osborn fault zone. This includes the Nancy Lee mine in section 31, T 18 N, R 26 W, the only recent producer. Description of mines, geology, and mineral output are shown in U. S. Geological Survey Bulletin 1082-I, Geology and Mineral Deposits of the St. Regis-Superior Areas, Mineral County, Montana.

As in our letter of May 14 commenting on other projects in the area, we foresee no conflict of this project with either mineral resources or the mineral industry.

Sincerely yours,

*O. M. Bishop*

O. M. Bishop, Chief  
Intermountain Field Operation Center

Date Recd. Processed	7-14-71
Initial	
Attach	
MAIL ROUTE	
30 G.O.P. MAIL	
30 Field Design	
30 Surfacing Design	
31 Office Engineers	
32 West Region	
32 Landscape	
33 East Region	
34 Hydraulic	
36 Traffic	
37 Pub. Hearings	
38 S.C. Roads	
39 Consultant Design	
File	

RECEIVED	
MAY 16 1971	
MAIL ROUTE	
CHIEF COUNSEL	
ASST. S.H.E. - ADV.	
ACCOUNTING	
PLANNING DIV.	
ASST. S.H.E. - PLAN.	
BRIDGE	
RECOMMENDATION	
RIGHT OF WAY	
ASST. S.H.E. - OPER.	
CONSTRUCTION	
MAINTENANCE	
MATERIALS	



## DEPARTMENT OF

## FISH AND GAME

Helena, Montana 59601

July 29, 1971

Mr. Grover O. Powers  
Preconstruction Engineer  
Montana Highway Department  
Helena, Montana 59601

Dear Grover:

We have reviewed the Environmental Impact Statement for Project I 90-1(12)22, Drexel-E & W, and have the following comments:

Concerning the report in general, we feel that fish, wildlife, and vegetation resources were treated very briefly. No mention is made of browse plants, the chief winter food supply of deer and elk in the area. There is also no mention made of highway mortalities of deer and possibly elk, which may be significant. There was no consideration given as to how to minimize or mitigate this potential loss and traffic hazard.

The report states that the right-of-way will consume 150 acres of land, some of which is used as winter game range, and that the vegetation will be replaced by reseeding. Most of this acreage is winter game range, and most of the present forage is of browse species, which cannot be successfully reseeded. Other forms of mitigation for loss of acreage and browse plants should be explored. For example, the acquisition of the Church Ranch (formerly Johnson Ranch) near the mouth of Marble Creek. This ranch is a source of chronic elk damage complaints. If it were not privately owned more elk would range in the area.

The statement that the overall impact of the interstate will have minimal effect on our management of the south face of Boyd Mountain as a big game winter range is misleading. It may not have much effect on our management of the area, but it could considerably reduce game populations in the area.

The report states that the damage to the natural resources, including wildlife, would be greater if the Camels Hump route were chosen. There is little basis in fact for this statement. Damage to wildlife may well be less over this route than through the canyon.

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July 29, 1971

Concerning fishery uses, we have the following comments:

The St. Regis River is heavily fished. An estimated 4,338 man-days of use by fishermen occurred in the period between May, 1968 and September, 1968 (Fishing Wave Survey, Montana Fish and Game Department). Most of this use is by Idaho and nonresident fishermen. This amount of use designates the St. Regis as one of the more important fishing waters in western Montana. The very brief write-up on fisheries included in the Environmental Impact Statement does very little to convey this importance.

Cutthroat trout were found to be the predominate trout species in the headwaters in fisheries surveys during 1968 and 1969. Brook trout were the most numerous trout species in the lower reaches. Other game fish species found in the stream were brown trout, Dolly Varden, rainbow trout, and mountain whitefish. Population estimates based on electrofishing data indicate 298 game fish per 1,000 feet of stream in the Hagan and Riverside area during the 1969 census. The trout planting program calls for an introduction of 9,000 catchable rainbow annually. The present write-up states that the principal species are planter rainbow. This statement is not substantiated by electrofishing data. Our planting program is considered effective in providing an increased catch for the nonresident fishermen using the area.

Paragraph two under Section V can best be covered by page 9 of the report titled Effect of Interstate Highway 90 Location on St. Regis River Aquatic Habitat by Norman R. Howse, Fisheries Biologist, U.S.F.S. Northern Region, Missoula, Montana, November, 1969, which summarizes the possible losses of trout habitat on the St. Regis due to highway construction.

The statement in Section V, "The adverse impact on fish habitat should not significantly affect the fish population." is incorrect. Loss of trout habitat leads to a reduction in trout numbers which greatly reduces the capability of a stream to provide recreational angling opportunity. Therefore, any destruction of habitat without full reclamation or mitigation thereof, will be detrimental to the fisheries resource in the St. Regis River.

Also in Section 5, while air and water pollution may be short-lived, such pollution is nonetheless illegal. Every effort should be made to conform with state and federal laws concerning pollution during construction.

We thank you for the opportunity to review these statements and make comments.

Sincerely,

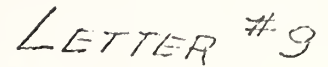
FRANK H. DUNKLE  
STATE FISH AND GAME DIRECTOR

By *Ralph W. Boland*  
RALPH W. BOLAND, ASSISTANT CHIEF  
ENVIRONMENTAL RESOURCES DIVISION

RWB/sd

cc: Department of Planning and  
Economic Development  
Walt Everin





State Department of Health

HELENA, MONTANA 59601

June 24, 1971

Lewis M. Chittim, P.E.  
State Highway Engineer  
Montana Highway Commission  
Helena, Montana 59601

39-JGS

Attention: Grover O. Powers, P.E.  
Preconstruction Engineer

Re: I 90-1(12)22, Drexel East &  
West

Dear Mr. Chittim:

This is in regard to the above referenced project.

We note that there is mention of proper drainage in this project; however we believe there could be an adverse environmental effect to the area. If any stagnant ponding areas are created by the construction, areas of this type will serve as ideal breeding spots for mosquitoes. In other words, we are concerned with depression areas that might be created by excavation or fill.

Yours very truly,

Chaibong W. Brinch

Claiborne W. Brinck, P.E., Director  
Division of Environmental Sanitation

CWB:VE\$::cp

ASST. DIR.	RETURN TO M & F
	MAY BE RETAINED
	STATE HWY. ENGR.
ES:cp	CHIEF COUNSEL
	ASST. S. H. E. ADMIN.
	ADJUTANT
	PLANNING SURVEY
	ASST. S. H. E. ENGR.
	ENGR.
	PL. CONSTRUCTION
	RIGHT OF WAY
	ASST. S. H. E. OPER.
	CONSTRUCTION
	MAINTENANCE
	MATERIALS
	OTHER

Date Recd.	Preconst	6-28-71
Act		
Info		
	MAIL ROUTE	
	30 COM R/H	
	30 Fish Design	
	30 Surching Design	
	31 Office Engineers	
	32 West Region	
	32 Landscaps	
	33 East Region	
	34 Hydraulic	
	35 Traffic	
	37 Air Planning	
	39 Air Locals	
	39 Contaminant Design	
	<del>File</del>	

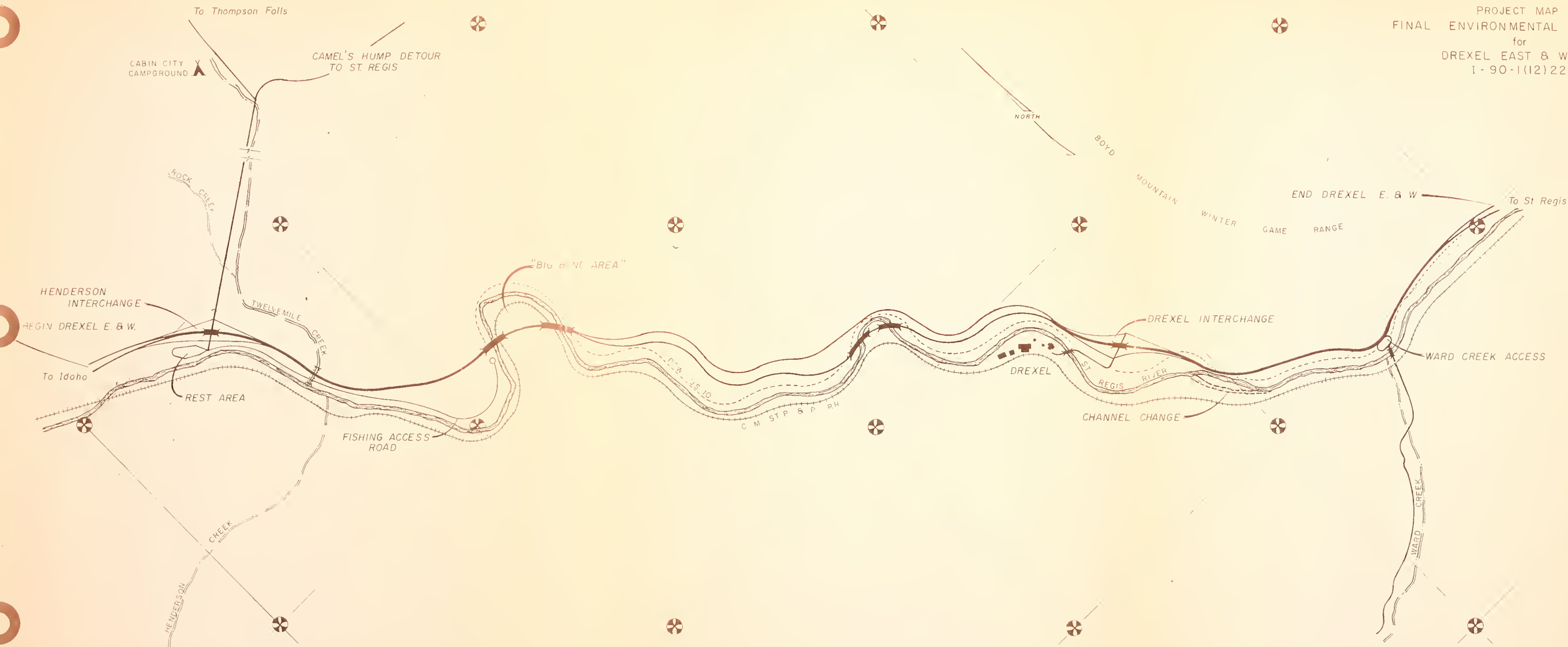








PROJECT MAP  
FINAL ENVIRONMENTAL STATEMENT  
for  
DREXEL EAST & WEST  
I - 90-1(12)22



PREPARED BY DESIGN CONSULTANTS  
MENASCO - McGUINN ASSOCIATES  
HELENA, MONTANA



PART 1 - Picture No. 1







PART 1 - Picture No. 2

